CEQA Scoping Meeting

Nutrient TMDL for Clear Lake, CA

Lori Webber

Central Valley Regional Water Quality Control Board

Presentation Outline

- What is the Basin Plan?
- Why are we amending the Basin Plan?
- What is the process and where are we?
- What are we looking for in terms of “Scoping”?
- Summary of information
- Current efforts
- Discussion on impacts

Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan)

- Federal Clean Water Act
  - Water Quality Standards
- California Water Code (Porter Cologne)
  - Beneficial Uses
  - Water Quality Objectives
  - Implementation Program including a Monitoring Program

Clean Water Act: 303(d) List and TMDLs

- Section 303(d) Clean Water Act requires states to develop a list of “impaired” waterbodies, or waterbodies that do not meet their beneficial uses.
- Clear Lake is impaired for nutrients.
- Due to the listing on the 303(d) list, a Total Maximum Daily Load (TMDL) for nutrients must be done for the lake.
- TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet beneficial uses.

303(d) List and TMDLs

- A TMDL contains water quality goal or target concentration that will result in achievement of beneficial uses.
- Pollutant sources are identified and loads are allocated.
- An implementation plan is developed that will reduce pollutant loading.

Basin Plan Amendment

- The water quality goal and implementation plan in the TMDL must be incorporated into our Basin Plan through a Basin Plan Amendment.
- The Basin Planning process complies with CEQA. As part of the process, a staff report is produced.

Where are we in the process?

Milestone	Estimated Date
Technical TMDL	2003 – 2005
CEQA Scoping Meeting	5 May 2005
Development of Staff Report	May – October 2005
Peer Review of Staff Report	October 2005 – Feb 2006
Public Comment Period	February – June 2006
Regional Board Hearing	June 2006
State Board Hearing	November 2006
OAL Approval	January 2007
USEPA Approval	April 2007

Scoping

Looking for comments on a range of actions, alternatives, mitigation measures and significant effects

Beneficial Uses of Clear Lake

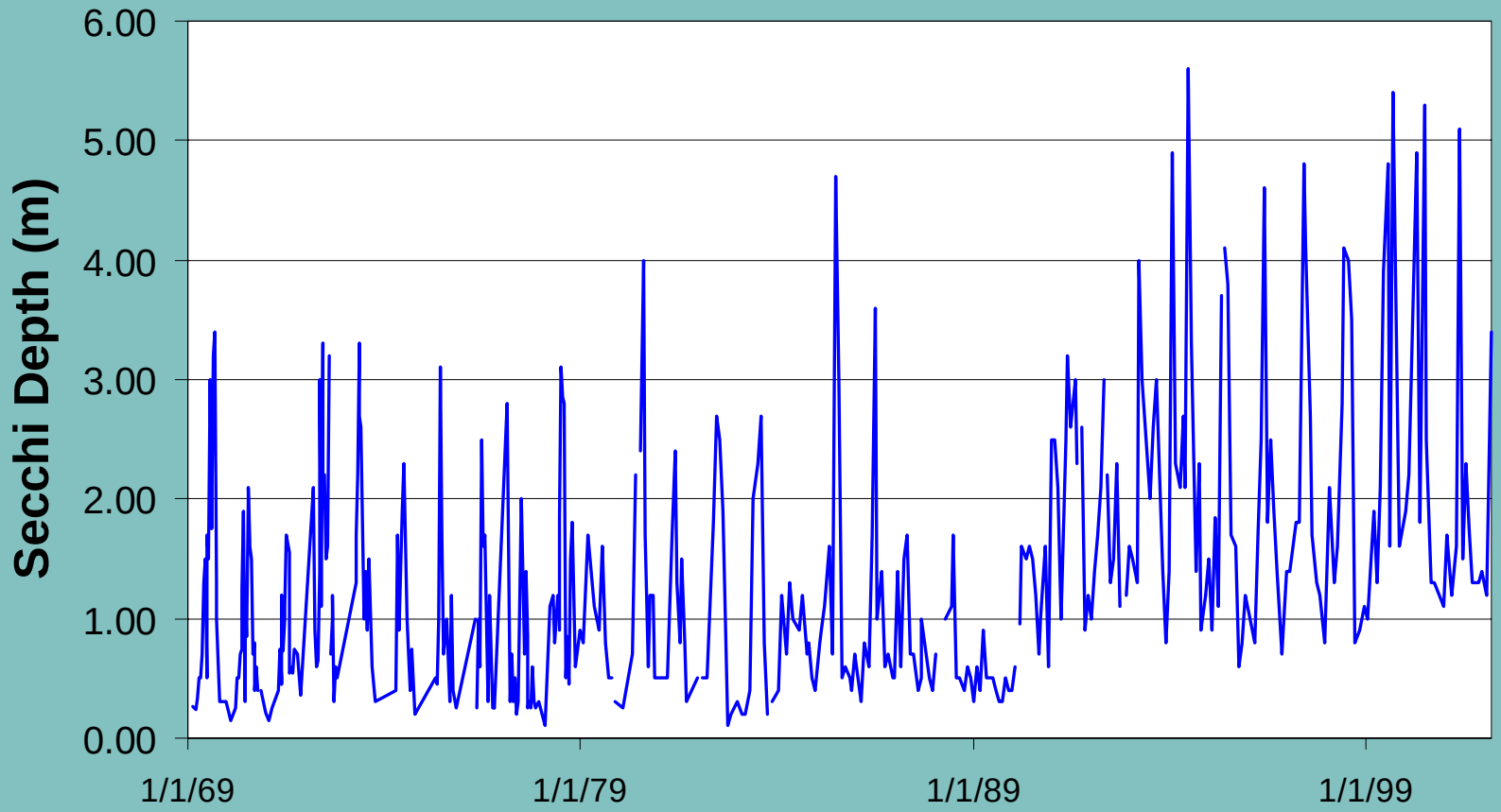
- MUN
- Agriculture
  - Irrigation
  - Stock Watering
- Recreation
  - REC-1
  - REC-2
- Freshwater Habitat
  - WARM
  - COLD (Potential)
- Spawning
  - SPWN (Warm)
- WILD
- COMM

Existing Conditions

- Nuisance algae blooms in summer and fall.

Existing Conditions

- Clarity in the lake has improved since 1992



Current Information

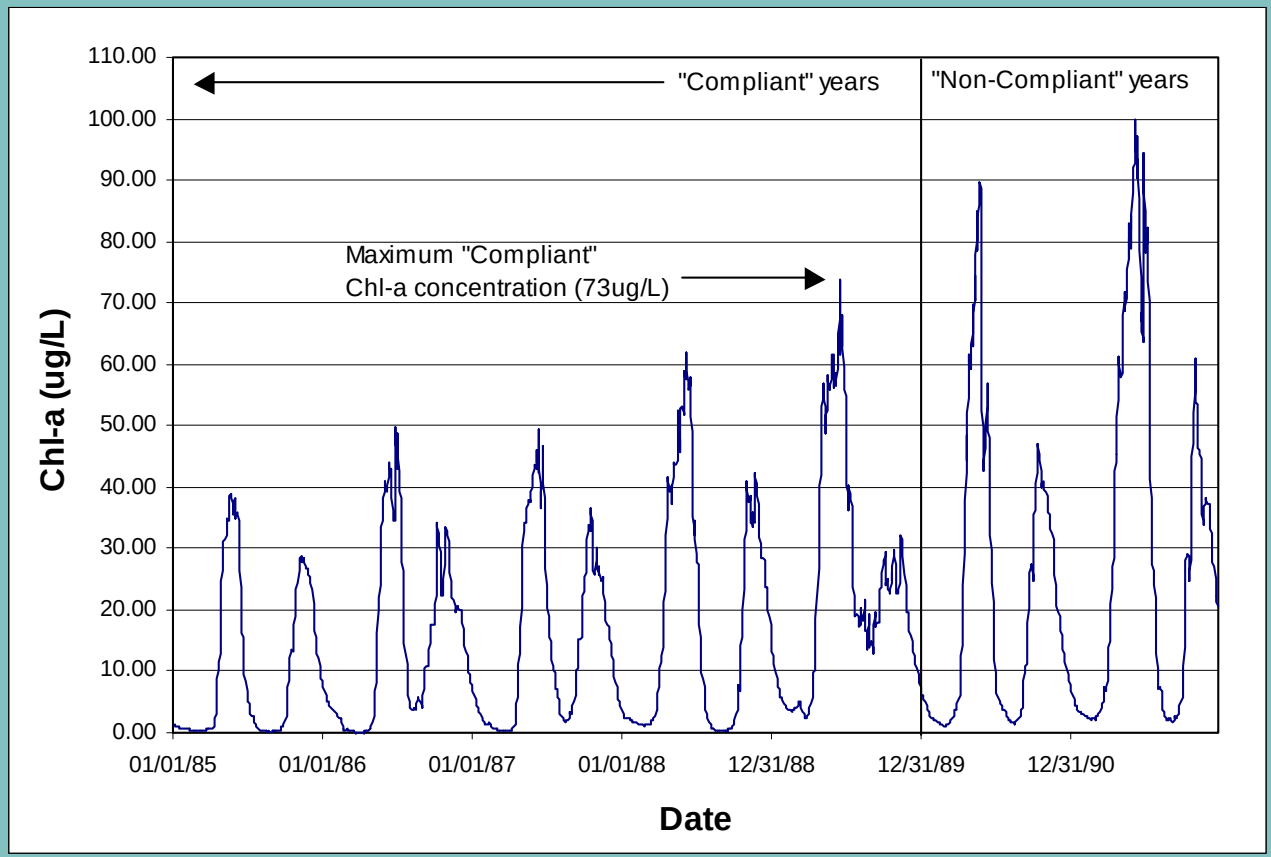
- 30+ years of water quality data collected by DWR
- Scientific Studies:
  - The Causes and Control of Phytoplankton (A. Horne), 1975
  - Clean Lakes Report (UCD), 1992
- Most reports conclude that phosphorus inputs from the watershed ultimately contribute to nuisance algae blooms. And they recommend reducing erosion from the watershed to control phosphorus.

Tetra Tech Report

- Incorporated data from DWR and others
- Developed computer models for the lake:
  - A watershed model that looks at land use, hydrology, rainfall and other data and calculates nutrient loads to lake
  - A receiving water of the lake which accounts for within lake processes and simulates chlorophyll-a concentrations

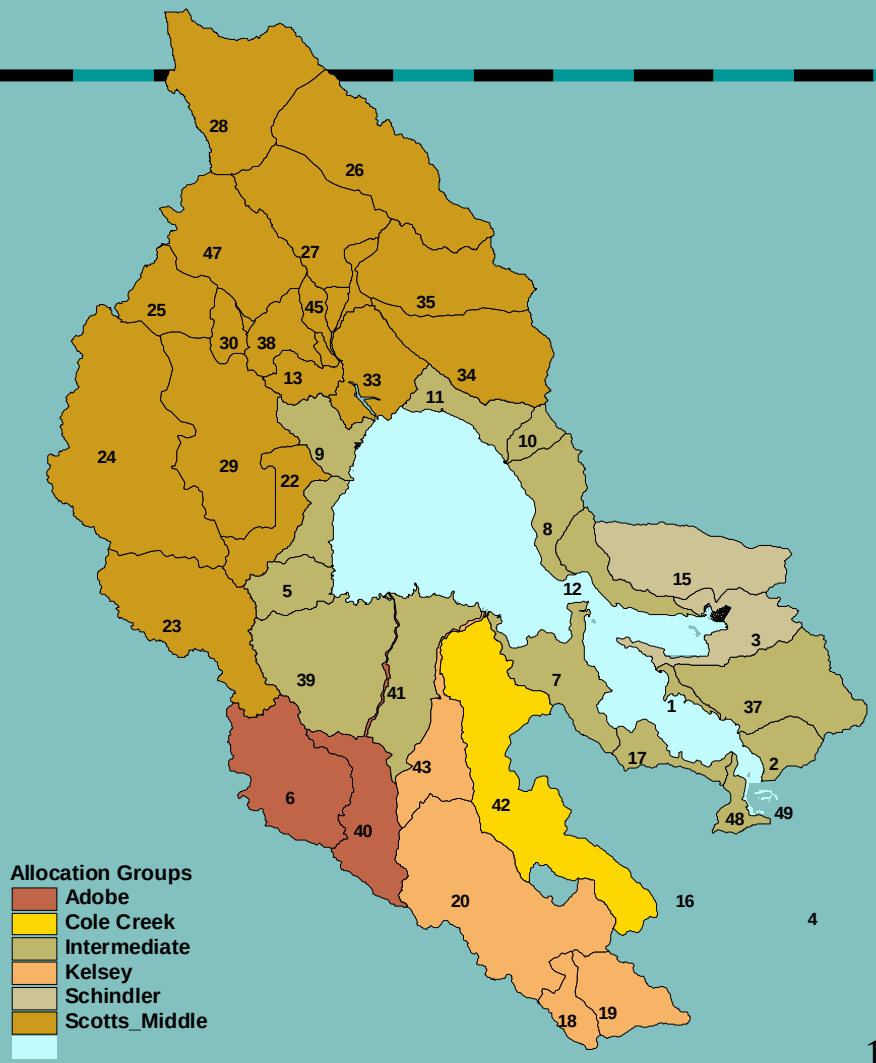
Tetra Tech Report

- Target: **73ug/L (ppb) chlorophyll-a**



Tetra Tech Report

- Allocates phosphorus load reductions by watershed



Tetra Tech Report

Allocation Group	Existing TP Loading (kg/day)	% TP Loading to Clear Lake	TMDL Loading (kg/day)	Percent Reduction
Intermediates	273.87	49%	178.02	35%
Schindler	26.79	5%	21.43	20%
Scotts/Middle	169.55	30%	67.82	60%
Adobe	30.06	5%	22.55	25%
Cole	23.20	4%	18.56	20%
Kelsey	35.74	6%	26.8	20%
Total:	**559.22**		**335.18**	**60%**

Current efforts that address erosion & nutrients in Clear Lake

- Middle Creek Marsh Restoration
- Grading ordinance
- Aggregate Resource Management Plan
- Wetlands Policy
- Special Districts
- Erosion Prevention and Education Committee

Current efforts that address erosion & nutrients in Clear Lake

- Coordinated Resource Management Plan (CRMP) Groups
- Agricultural Waiver Program
- NPDES Phase II Stormwater Permit
- Lake County Land Trust

- **Is the improved clarity a result of these activities?**

Preliminary Alternatives

- No action
- Target Selection
  - Adopt 73 ug/L chlorophyll-a target as recommended in the TT Report
  - Adopt a different target for the lake using a different target and/or methodology (eg. Secchi depth)

Preliminary Alternatives

- TMDL Implementation
  - Erosion control measures to reduce phosphorus inputs
    - Timber
    - Roads
    - Grazing
    - Conversion to vineyards
  - Other?

CEQA Checklist

Environmental effect of TMDL on the following categories:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology & Soils
- Hazardous materials
- Hydrology & Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities & Sewer Services

More Information

- http://www.waterboards.ca.gov/centralvalley/
- Click on “Programs”
  - Click on “Impaired Waterbodies and TMDLs”
  - Click on “Clear Lake Nutrient TMDL”
- Future Notifications
  - Email subscription (from website)
  - Snail Mail (Leave name and address)

Contacts for Information

Lori Webber

lwebber@waterboards.ca.gov

(916) 464-4745